

# GEAR COUPLING



## Features :

- High Power to weight ratio.
- Compact assembly.
- Accommodates angular, parallel and axial misalignment.
- Larger bore capacities.
- Crown Gear teeth for longer life.
- Less backlash error.
- Heat treated as per application.
- Generally used upto 120°C.
- Close tolerance connecting bolts.
- Interchangeability.
- Minimum downtime.

## Wide Range :

Flexocon offer wide range of Geared Couplings :

- Full Geared Coupling.
- Half Geared half Rigid Coupling.
- Mill Motor type full Geared Coupling.
- Brake drum Type Geared Coupling.
- Brake-disc Type Geared Coupling.
- Shear-pin Type Geared Coupling.
- Spacer Type Geared Coupling.
- Single sleeve Type Geared Coupling.
- Floating shaft Type Geared Coupling.
- Geared Coupling for vertical Applications.
- Slide Type Geared Coupling.
- Limiting end-float type Geared Coupling.
- Torsion Shaft with Geared Coupling.

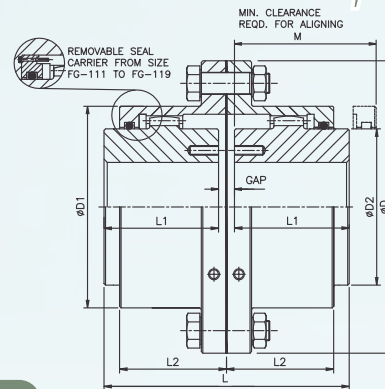
## Construction :

Gear Coupling is used to join two rotating shafts for transmission of Mechanical Power.

Flexocon Full gear Flexible Coupling consists of two identical hubs with multi crown teeth, two identical flanged sleeves with internal teeth, a set of bolts, nuts and spring washers, lube plugs and two oil/grease retaining O-ring over the hubs.

Flexocon Geared Couplings are manufactured employing tested raw materials through precision manufacturing processes using special purpose machines, Jigs, fixtures, tooling and gauges and are subject to continuous inspection. Teeth on Hubs and sleeves of Geared Couplings are properly Hardened, For standard Couplings a Hardness of 300-350 BHN is maintained.

Flexocon Geared Couplings are designed and manufactured to accommodate Angular Parallel and Axial Misalignments. Upto  $\pm 1.50$  angular misalignment capacity is provided standard Couplings.



## FULL GEAR COUPLING

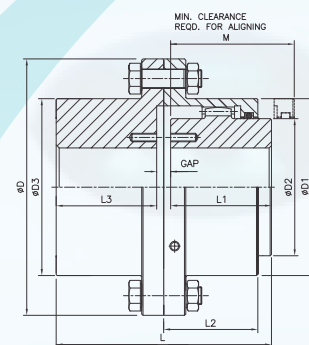
### ENGINEERING DATA AND DIMENSIONS FOR FULL GEAR COUPLING

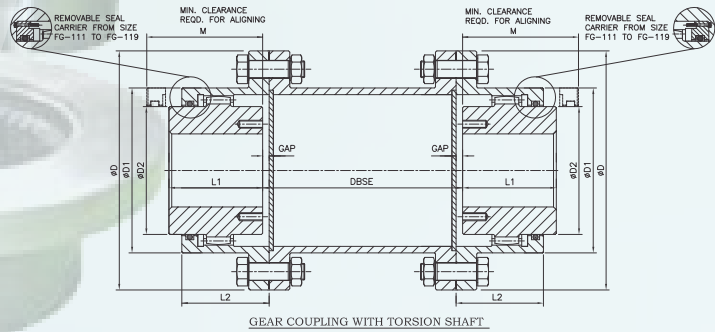
Coupling No.	KW@100 RPM	Max Torque in kgm	Max Speed (RPM)	GD2 Value (KGM2)	Wt. in Kg.	Max. Bore	Plot Bore	DIMENSIONS IN mm							
								D	D1	D2	L	L1	L2	Gap	M
FG 100	5.2	50	7500	0.075	5	35	15	120	75	50	93	45	40	3	50
FG 101	10.5	100	6300	0.139	10	50	20	170	110	65	115	55	49	5	55
FG 102	26.1	250	5000	0.204	15	60	20	185	125	85	145	70	62	5	80
FG 103	45.5	440	4000	0.402	26	75	30	220	150	105	175	85	78	5	105
FG 104	87.3	840	3300	0.941	40	90	40	250	175	130	215	105	96	5	126
FG 105	136.5	1310	2800	1.900	62	110	50	290	200	155	230	110	106	10	138
FG 106	209	2000	2500	3.050	85	125	60	320	230	175	260	125	117	10	155
FG 107	360	3450	2100	5.250	120	140	75	350	260	205	290	140	134	10	177
FG 108	470	4500	1800	8.530	180	160	90	380	290	230	320	155	147	10	190
FG 109	585	5600	1700	15.05	210	180	100	430	330	250	340	165	156	10	208
FG 110	857	8200	1400	30.50	290	220	125	490	390	310	370	180	171	10	218
FG 111	1146	11150	1250	57.00	550	260	140	545	445	350	410	200	192	10	240
FG 112	1532	14900	1125	88.00	710	300	150	590	490	400	490	240	231	10	280
FG 113	2084	20275	1000	138.0	980	330	160	680	555	440	535	260	242	15	310
FG 114	2980	29000	900	290.0	1320	370	160	730	610	500	575	280	266	15	330
FG 115	3620	33865	800	353.0	1700	410	200	780	660	540	655	320	305	15	370
FG 116	6250	58465	710	688.0	2550	455	200	900	755	625	720	350	335	20	423
FG 117	8890	83160	630	1236.0	3620	520	225	1000	855	720	820	400	386	20	490
FG 118	11770	110100	560	1964.0	4860	610	250	1100	950	810	920	450	430	20	533
FG 119	15521	145190	500	3012.0	6380	710	250	1250	1050	910	1000	485	446	30	558

## HALF GEARED HALF RIGID COUPLING

### ENGINEERING DATA AND DIMENSIONS FOR HALF GEARED HALF RIGID COUPLING

Coupling No.	KW@100 RPM	Max Torque in kgm	Max Speed (RPM)	GD2 Value (KGM2)	Wt. in Kg.	DIMENSIONS IN mm												
						Max. Bore		Pilot Bore	D	D1	D2	D3	L	L1	L2	L3	Gap	M
						Flex	Rigid											
HG 100	5.2	50	7500	0.075	5	35	45	15	120	75	50	65	93	45	40	45	3	50
HG 101	10.5	100	6300	0.139	10	50	60	20	170	110	65	85	115	55	49	55	5	55
HG 102	26.1	250	5000	0.204	15	60	75	20	185	125	85	110	140	70	62	65	5	80
HG 103	45.5	440	4000	0.482	26	75	90	30	220	150	105	125	175	85	78	85	5	105
HG 104	87.3	840	3300	0.941	40	90	110	40	250	175	130	150	210	105	96	100	5	126
HG 105	136.5	1310	2800	1.900	62	110	130	50	290	200	155	180	225	110	106	105	10	138
HG 106	209	2000	2500	3.050	85	125	150	60	320	230	175	200	250	125	117	115	10	155
HG 107	360	3450	2100	5.250	120	140	170	75	350	260	205	240	290	140	134	130	10	177
HG 108	470	4500	1800	8.530	180	160	200	90	380	290	230	285	320	155	147	145	10	190
HG 109	585	5600	1700	15.05	210	180	220	100	430	330	250	315	340	165	156	155	10	208
HG 110	857	8200	1400	30.50	290	220	260	125	490	390	310	370	370	180	171	170	10	218





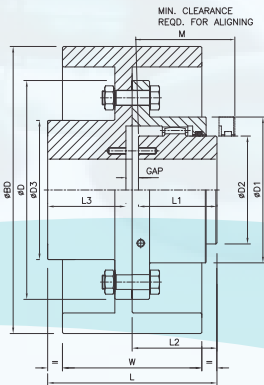
# GEARED COUPLING WITH TORSION SHAFT SPACER TYPE GEARED COUPLING

## ENGINEERING DATA AND DIMENSION FOR SPACER TYPE GEAR COUPLING

Coupling No.	KW@100 RPM	Max Torque in KGM	DBSE	Max. Bore	Pilot Bore	DIMENSION IN mm						
						D	D1	D2	L1	L2	Gop	M
FG 100 SPC	5.2	50	To Suit Customer's requirement.	35	15	120	75	50	45	40	1.5	50
FG 101 SPC	10.5	100		50	20	170	110	65	55	49	2.5	55
FG 102 SPC	26.01	250		60	20	185	125	85	70	62	2.5	80
FG 103 SPC	45.5	440		75	30	220	150	105	85	78	2.5	105
FG 104 SPC	87.3	840		90	40	250	175	130	105	96	2.5	126
FG 105 SPC	136.5	1310		110	50	290	200	155	110	106	5	138
FG 106 SPC	209	2000		125	60	320	230	175	125	117	5	155
FG 107 SPC	360	3450		140	75	350	260	205	140	134	5	177
FG 108 SPC	470	4500		160	90	380	290	230	155	147	5	190
FG 109 SPC	585	5600		180	100	430	330	250	165	156	5	208
FG 110 SPC	857	8200		220	125	490	390	310	180	171	5	218
FG 111 SPC	1146	11150		260	140	545	445	350	200	192	5	240
FG 112 SPC	1532	14900		300	150	590	490	400	240	231	5	280
FG 113 SPC	2084	20275		330	160	680	555	440	260	242	7.5	310
FG 114 SPC	2980	29000		370	160	730	610	500	280	266	7.5	330
FG 115 SPC	3620	33865		410	200	780	660	540	320	305	7.5	370
FG 116 SPC	6250	58465		455	200	900	755	625	350	335	10	423
FG 117 SPC	8890	83160		520	225	1000	855	720	400	386	10	490
FG 118 SPC	11770	110100		610	250	1100	950	810	450	430	10	533
FG 119 SPC	15521	145190		710	250	1250	1050	910	485	446	15	558

# BRAKE DRUM TYPE GEARED COUPLING

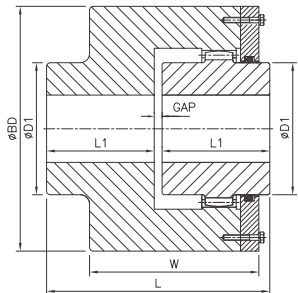
## BOLTED TYPE



## INTEGRAL TYPE

### DIMENSION AND ENGINEERING DATA FOR INTEGRAL TYPE BRAKEDRUM GEAR COUPLING

Coupling No.	KW@ 100 RPM	Max Speed (RPM)	Max Bore	BD	W	D1	L1	L	WT.	Gap
HGBD-100	10.5	8000	45	100	80	65	55	108	10	3
HGBD-140	26.1	6300	55	140	100	85	70	143	19	3
HGBD-150	26.1	6300	55	150	100	85	70	143	22	3
HGBD-200	87.3	4000	85	200	110	130	105	215	50	5
HGBD-250	136.5	3300	105	250	130	155	110	225	90	5

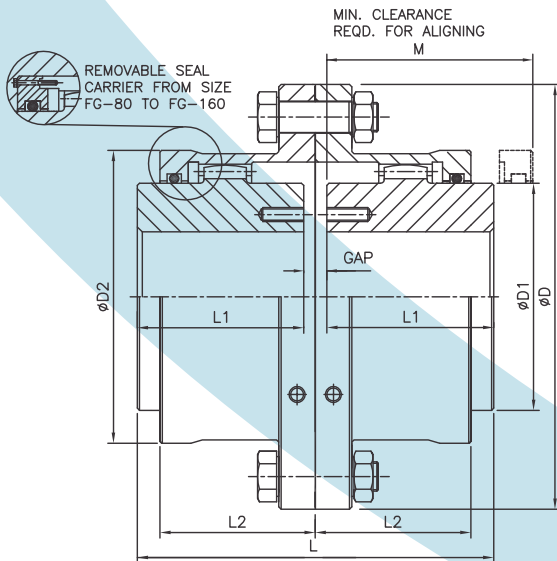


GEAR COUPLING WITH INTEGRAL DRUM

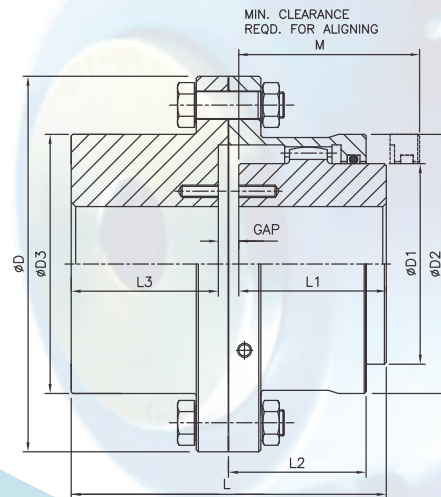
### DIMENSION AND ENGINEERING DATA FOR BOLTED TYPE GEARED BRAKEDRUM COUPLING

Coupling No.	KW@ 100 RPM	Max Torque in KGM	Max Speed (RPM)	Wt. in Kg.	Max. Bore mm			DIMENSION IN mm											
					Flex Hub	Rigid Hub	Pilot Bore	BD	W	D	D1	D2	D3	L	L1	L2	L3	GAP	M
HGD-100/150	5.2	50	7500	11.5	35	45	15	150	75	120	75	50	65	93	45	40	45	3	50
HGD-100/160	5.2	50	7500	13.7	35	45	15	160	75	120	75	60	65	93	45	40	45	3	50
HGD-101/200	10.5	100	6300	23.5	50	60	20	200	110	170	110	65	85	115	55	49	55	5	55
HGD-102/250	26.1	250	5000	41.0	60	75	20	250	125	185	125	85	110	140	70	62	65	5	80
HGD-104/300	87.3	840	3300	72.0	90	110	40	300	175	250	175	130	160	210	105	96	100	5	126
HGD-105/400	136.5	1310	2800	160	110	130	50	400	200	290	200	155	185	225	110	106	105	10	138
HGD-106/500	209	2000	2500	225	125	150	60	500	230	320	230	175	215	250	125	117	115	10	155

# FULL AND HALF GEARED COUPLING



FG: FULL GEAR COUPLING



HG: HALF GEARED HALF RIGID COUPLING

## ENGINEERING DATA AND DIMENSION FOR FULL AND HALF GEAR COUPLING

SIZE	RATING KW PER 100 RPM	MAX SPEED RPM	MAX BORE		PILOT BORE	DIMENSION IN mm										FULL GEAR		HALF GEAR	
			FLEX HUB	RIGID HUB		D	D1	D2	D3	L	L1	L2	H	M	GAP	WT. KG.	GD2 KGM2	WT. KG.	GD2 KGM2
10 (AGMA)	6	8000	35	50	12	116	51	69	69	89	43	39	17	49	3	4	0.02	4	0.02
15 (AGMA)	18	6500	55	70	12	152	76	98	98	103	50	48	20	62	3	9	0.08	9	0.08
20 (AGMA)	37	5600	70	90	15	178	95	127	124	127	62	60	20	75	3	15	0.18	14.5	0.18
25 (AGMA)	67	5000	85	105	20	213	117	150	146	159	77	75	22	92	5	30	0.43	25	0.44
30 (AGMA)	110	4400	100	130	20	240	140	182	173	187	91	88	22	106	5	42	0.80	39	0.84
35 (AGMA)	170	3900	120	150	25	279	165	210	200	218	106	102	29	130	6	65	1.72	62	1.84
40 (AGMA)	260	3600	150	170	45	318	200	248	230	248	121	118	29	149	6	95	3.28	91	3.52
45 (AGMA)	360	3200	165	195	45	346	220	272	259	278	135	130	29	165	8	130	5.16	122	5.40
50 (AGMA)	480	2900	180	215	45	389	240	302	289	314	153	148	38	187	8	185	9.48	177	10.00
55 (AGMA)	630	2650	200	235	60	426	270	332	318	344	168	160	38	209	8	240	14.76	231	15.44
60 (AGMA)	900	2450	215	260	60	457	290	361	349	382	187	176	26	228	8	300	19.60	286	20.80
70 (AGMA)	1490	2150	250	305	60	527	340	418	406	452	221	215	29	268	10	475	41.20	454	44.00
80 (AGMA)	2300	1750	275		75	590	385	485		508	249	243	32	300	10	690	82.88		
90 (AGMA)	2900	1550	300		75	660	420	535		567	276	265	38	325	15	900	139.80		
100 (AGMA)	4100	1450	330		100	711	470	595		626	305	294	45	355	16	1250	223.80		
110 (AGMA)	5300	1330	360		125	775	510	640		684	334	322	51	385	16	1600	344.56		
120 (AGMA)	7200	1200	410		125	838	575	715		720	352	341	54	400	16	2080	534.92		
130 (AGMA)	8100	1075	435		150	911	615	775		762	371	360	54	435	20	2530	759.12		
140 (AGMA)	10400	920	475		150	965	670	840		806	393	378	54	458	20	3140	1092.08		
150 (AGMA)	12100	770	510		150	1029	720	890		858	419	405	54	484	20	3760	1466.60		
160 (AGMA)	13400	650	535		150	1111	750	940		907	441	420	57	505	25	4435	1959.72		

### NOTES :

- Dynamically balanced Standard or Special Couplings are available for higher speed and/or sensitive applications.
  - Maximum bores are for uniformly loaded drives only, use rectangular parallel keys.
- Couplings with extended hubs can be provided to meet application requirements.



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